STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
Division of Mining, Land and Water
July 1, 2002

(DRAFT)
SITE-SPECIFIC PLAN
FOR
LAND NORTH AND SOUTH OF HAPPY VALLEY
AND
COLDFOOT

PROPOSED ACTION

This site-specific plan proposes classification of approximately 105,750 acres of state lands along the Dalton Highway and Trans-Alaska Pipeline from Pipeline Milepost (PLMP) 56.5, which is located just north of Pump Station 2, southward to PLMP 117.2 which is located just south of Pump Station 3 at PLMP 104.3, and at Coldfoot from approximately PLMP 232.3 to PLMP 240.1. The land within both locations is unclassified state land. The North Slope Borough has selected portions of the project area as part of its municipal entitlement under AS 29.65. The purpose of this plan is to consider the criteria set out under AS 38.04.065(b) and 11 AAC 55 to determine the proper classification under AS 38.04.065.

For ease and consistency, where possible locations are identified using pipeline milepost distances with PLMP 0 beginning on the North Slope.

SITE FACTORS

Location: Refer to Site-Specific Planning Area Maps
Geographic: The majority of the planning area is in North Slope Coastal Plain and foothills on the north side of the Brooks Range along the Dalton Highway. The remaining smaller portion of the area is at Coldfoot located on the south side of the Brooks Range.
Borough: All lands except those in T28N, R12W FM and T29N, R12W, FM are located within the North Slope Borough. Those lands not in the North Slope Borough are located at Coldfoot and are outside an organized borough.
Native Region: Arctic Slope Regional Corporation and Doyon LTD.
Coastal District: North Slope Borough Coastal Management Zone- The inland boundary extends inland along the Sagavanirktok (including Accomplishment and Section Creeks), Ridbon, Lupine, Echooka, Ivishak, Saviukviayak (including Flood Creek), drainages. Along

each stream, a one-mile corridor from mean high water is included within the coastal zone. Portions of the Sagavanirktok and Ribdon Rivers are in the planning area. The coastal zone extends inland along the Sagavanirktok River from PLMP 56.5 to approximately PLMP 111 in T8S, R14E, UM.

USGS Map Coverage:

Sagavanirktok A-3, A-4, B-3, B-4
Philip Smith Mountains C-3, C-4**,** D-3, D-4
Wiseman A-1, B-1

LEGAL DESCRIPTION

Map Reference	Legal Description
AREA NORTH AND SOUTH OI HAPPY VALLEY	
Map 1	T1N, R15E, UM Section 6, 7,18, 19 Containing 2519 acres, more or less
Map 2	T1N, R14E, UM Section 1, 5, 8, 11-15, 17-36 Containing 17,900 acres, more or less
Map 3	T1S, R14E, UM Section 1-4, 9-11, 14-16, 21-23, 27, 33, 34 Containing 10,240 acres, more or less
Map 4	T2S, R14E, UM Section 3, 4, 9, 10, 15-17, 20-22, 28,29, 32, 33 Containing 8,960 acres, more or less
Map 5	T3S, R14E, UM Section 4, 5, 7-9, 16-20, 29-32 Containing 8,853 acres, more or less
Map 6	T4S, R14E, UM Section 5-8, 17-20, 29-32 Containing 7653 acres, more or less
Map 7	T5S, R14E, UM Section 4, 5, 8, 9, 16, 17, 19-21, 26-32 Containing 8,815 acres, more or less
Map 8	T6S, R14E, UM Section 5-8, 17-20, 29-32 Containing 7,457 acres, more or less
Map 9	T7S, R14E, UM Section 4-9, 16, 17, 20, 21, 28, 29, 32 Containing 8,265 acres, more or less
Map 10	T7S, R13E, UM Section 12, 13, 24, 25, 36 Containing 3200 acres, more or less
Map 11	T8S, R13E, UM Section 1, 11-17, 20-24, 26-28, 32-34

	Containing 12,160 acres, more or less
Map 12	T8S, R14E, UM Section 5, 6, 7, 8, 18 Containing 3166 acres, more or less
COLDFOOT AREA	
Map 13	T29N, R12W, FM Section 23-27, 34, 35 Containing 2,560 acres, more or less
Map 14	T28N, R12W, FM Section 3, 4, 9, 10, 15, 16, 20, 21, 22 Containing 4,020 acres, more or less

TITLE/LAND STATUS

All the land in this site-specific plan is state owned. These lands were acquired by the state under Section 6(b), the General Grant statehood land entitlement, under the Act of July 7, 1958, 72 Stat. 339, as amended except the lands at Coldfoot in T28N, R12W, FM which were acquired under the Community Grant statehood entitlement (Section 6(a) of the Statehood Act). The State received tentative approval for all of the lands on August 19, 1992, except a portion of the Community Grant lands, which were received January 5, 1994. Specific title and land status information is provided on Maps 1-14 and accompanying reports in Appendix I.

Classification: The lands within the planning area are unclassified.

Special Use Land: All state lands within this site-specific plan in the Umiat Meridian are designated as "Special Use Lands" by the Department of Natural Resources. The following activities in addition to those activities requiring a Department permit under 11 AAC 96 require authorization: Geophysical activity; other exploration activity; construction activity; and transportation activity except along established roads.

Mineral Status: The lands in the planning area are open to mineral entry with the exception of the areas closed for pipeline purposes under Mineral Closing Orders 67, 67A and 529. Mineral Closing Order (MCO) 67, as amended, closes a mile wide corridor, one-half mile either side of the alignment of the Northwest Alaskan Gas Pipeline, and MCO 529 closes a corridor one mile wide, one-half mile either side of the alignment of the Trans-Alaska Gas Pipeline.

Municipal Selections: The North Slope Borough has filed selections ADL 414836 located in T1N, R15E UM and T1N, R14E UM (Pump Station 2), and ADL 414838 located in T3S, R14E UM (Happy Valley).

DESCRIPTION OF AREAS AND RESOURCE VALUES

Physical Geography: The planning area can best be described as being located in portions of three physiographic provinces. The lands in the northern most part of the planning area beginning at approximately PLMP 56.5 near Pump Station 2 until approximately PLMP 60 are considered in the Arctic Coastal Plain. The lands in that portion of the planning area extending south from approximately PLMP 60 to approximately PLMP 117.2 south of Pump Station 3 are considered in the Arctic Foothills. Coldfoot is considered located in the Chandalar Ridge and Lowland Section.

The Arctic Coastal Plain is a smooth plain, rising gradually for 60 miles inland from the Beaufort Sea south to an elevation of about 600 feet. The area is characterized by a network of polygonal ground and oriented thaw lakes in low-lying areas. Bedrock hills composed of poorly consolidated shale and sandstone are scattered on the smooth plain. The Sagavanirktok River that drains this area is braided. The river has many shallow water channels. Sheet ice from successive overflows develops on various sections of the floodplain in winter.

The Arctic Foothills Province is a generally hilly area formed by glacial moraines and bedrock hills of sandstone, siltstone, and shale. The area is drained primarily by the north-flowing Sagavanirktok River. The river is characterized by a meandering channel in its upper reach (PLMP 85-110) and a braided river system in the lower reach (PLMP 60-110).

Near the southern end of the Alaska Range at Coldfoot (PLMP 237) the planning area is in the Chandalar Ridge and Lowland Providence. The area consists of low ridges and lowlands.

Soils: Typical soil in the Arctic Coastal Plain consists of several feet of ice-rich organic silt over sands and gravels. Massive ground ice is widespread. Along the braided Sagavanirktok River unvegetated coarse-grained alluvium predominates on the active floodplain. The coastal plain is underlain by thick, continuous permafrost. Frozen soil rich in ice occurs at a shallow depth. Thick permafrost underlies the coastal plain, impeding drainage and creating saturated soils in most areas.

Thick permafrost extends over the hills and plateaus of the northern foothills of the Brooks Range. The foothills have more distinct drainage patterns and fewer lakes than the Arctic Coastal Plain. The moraines in the Arctic Foothills are composed of coarse-grained till deposits covered with organic windblown silt. Flat-floored upland depressions are partially filled with ice-rich peat and organic-rich slope wash deposits. This area is underlain by continuous permafrost. In the floodplain of the Sagavanirktok River, frozen ground occurs in the area away from the active channel, and discontinuously frozen ground is present adjacent to the active channel.

In the Chandalar Ridge and Lowland area, which includes Coldfoot, the soils are strongly influenced by glacial advances. Generally, coarse-grained glacial and glaciofluvial

sediments are distributed near the main channels of the Middle Fork of the Koyukuk and the South Fork Koyukuk Rivers. The Middle fork of the Koyukuk runs adjacent to Coldfoot. Away from the channels, the soils consist of fine-grained silt and clay overlying coarse-grained glacial till. This area is underlain by discontinuous permafrost. Permafrost is generally absent beneath the floodplains that are not vegetated.

Seismicity: The planning area is a region of low seismicity and low magnitude.

Water: The planning area (except for Coldfoot which falls within the South Side of the Brooks Range Hydrological Region) falls within the North of the Brooks Range hydrological Region. This region extends from the Beaufort Sea to about PLMP 166 and is located within the Arctic Slope Drainage. Important rivers in this region are the Sagavanirktok, Kuparuk, and Atigun. The dominant drainage is the Sagavanirktok River, which flows north to the Beaufort Sea and is a predominate feature in the northern portion of the planning area. The state has determined that the Sagavanirktok River is navigable.

Peak flows in these rivers are driven by a combination of weather conditions. Heavy, sustained rains in the Brooks Range, particularly during ice breakup, usually trigger peak flows in these rivers. Flows increase rapidly in response to rainfall events because the characteristics of the Brooks Range and permafrost conditions of the slope result in low storage capacity for precipitation. Winter flows in these rivers are small to none. Low flows during the winter in the Sagavanirktok River lead to extensive accumulations of ground fast ice (aufeis). Aufeis accumulations constitute a major management problem for roadways, culverts, and structures that are located in areas subject to ice accumulation. Breakup flows over the aufeis generally produce maximum water levels in the rivers.

The planning area at Coldfoot is in the South Side of the Brooks Range Hydrological Region. This region is part of the Yukon Drainage. The principal river adjacent to the planning area is Middle Fork Koyukuk. Creeks in the area include Slate Creek, Clara Creek and Marion Creek. Maximum flows in the Middle Fork of the Koyukuk River and the creeks are usually triggered by intense rainfall. The state has determined that the Middle Fork of the Koyukuk River is navigable.

Minerals: In the northern portion of the planning area there is low potential for locatable minerals as the area is characterized by thick sedimentary rock, indirect geophysical evidence that suggests a low potential.

In the planning area near Coldfoot, there is abundant historical and direct evidence of the existence of minerals through the active mining operations in the region.

Some land within this site-specific plan is closed to entry under state locatable mineral and mining laws. Mineral Closing Orders (MCO) that are in place include MCO 67 which closes a mile wide corridor, one-half mile either side of the alignment of the Northwest Alaskan Gas Pipeline, and MCO 529 which closes a corridor one mile wide,

one-half mile either side of the alignment of the Trans-Alaska Gas Pipeline. The TAPS line ROW within the planning area was not closed to mineral entry, although significant portions of the TAPS line fall within the area covered by MCO 67 and MCO 529 (see plats).

Oil and Gas: Existing North Slope oil and gas fields are located generally along the coast of the Arctic Ocean, north of the planning area. The oil and gas industry has shown renewed interest in conducting exploration activity in the North Slope Foothills area, which includes the entire planning area except the Coldfoot node. The Department of Natural Resources, Division of Oil and Gas conducted lease sales in this are in 2001 and 2002, and the DNR Five-Year Oil and Gas Leasing Schedule shows sales proposed in the North Slope Foothills in 2003 through 2006. Over half the planning area was leased in the 2001 sale and or bid on in the 2002 sale. No oil or gas exploration wells have been drilled within the planning area and no discoveries have been made. More information about oil and gas leasing, potential impacts, and mitigation measures can be found in the Final Finding of the Director for Oil and Gas Lease Sale – North Slope Foothills Areawide, prepared by DNR and issued February 7, 2001.

The Trans-Alaska Pipeline System (TAPS) oil pipeline runs the length of the planning area. The pipeline was built between 1974-1978 to transport oil from the North Slope of Alaska to the port of Valdez. At Valdez the oil is shipped to ports on the West Coast of the United States and other ports.

The planning area is also the potential route of a natural gas line to transport the massive natural gas reserves on the North Slope to markets. The three general routes for such a line are: 1) a pipeline from the North Slope to a tidewater port at Valdez or another port; 2) a pipeline roughly following the Alaska Highway through Canada to tie in with natural gas distribution system in Canada and the lower 48 States; or 3) a pipeline from the North Slope oil and gas fields along the Arctic Ocean coast to the Mackenzie River delta in Canada, and then down the Mackenzie River eventually connecting to the Canada/US distribution system. The first two routes would traverse the planning area.

The state and BLM have already issued Rights-of-Way through the planning area to two gas line companies: The Northwest Alaska Pipeline Company for the Alaska Natural Gas Transportation System (ANGTS) and to Yukon-Pacific Corporation for the Trans-Alaska Gas System (TAGS). The ANGTS would follow the Alaska Highway, while the TAGS runs to Valdez. Various government and industry groups have been actively exploring the feasibility of constructing these various gas lines, but no decision has been made to build any of them at this time. Nonetheless, the planning area is a vital potential route for a future gas line.

Materials: Deposits of sand, gravel, and quarry stones are abundant. **S**ands and gravels are plentiful in glacial till deposits and in flood plains along river valleys, especial near the Brooks Range. Sands, gravels, and quarry stones have been mined and used for construction, regular operation, and maintenance of workpads, road beds and surface materials, flood damage control, and river embankments associated with the Trans-

Alaska Pipeline, the Dalton Highway and in the Coldfoot area. Existing material sites are located in the planning area.

Vegetation: The distribution and extent of vegetation in the planning area is strongly influenced by elevation, soil characteristics, temperature, and moisture. The northern most area southward to PLMP 60 located in the Arctic Coastal Plain is considered the lowland tundra vegetation zone. The coastal plain supports lowland tundra vegetation types. Wetland plant communities characterized by sedges, grasses, and mosses are the predominant feature of the lowland tundra zone.

From PLMP 60 southward to the PLMP 117.2 of the planning area is considered in the upland tundra vegetation zone. The upland tundra vegetation zone includes moist tundra, alpine (dry) tundra, and shrub or high brush tundra. Drainage patterns and processes of weathering and deposition primarily determine the distribution of vegetation communities. The most common vegetation type of the foothills is Tussock tundra, which is the predominant type on old glacial moraines. Dwarf shrub communities occur on rocky moraine ridges. Active floodplains and small drainages support willow and alder shrub communities. Inactive floodplains support extensive wet sedge meadows. Revegetation of disturbed areas can be expected to be slow in this area.

The Coldfoot portion of the planning area is in the boreal forest vegetation zone. The predominant vegetation types of the boreal forest zone are evergreen forests of black and white spruce. Extensive areas of deciduous forest also occur in this zone, as well as large areas of shrub and herbaceous vegetation types, such as sub-arctic lowland sedge, sedge-moss bog meadows, and shrub bogs. Alder and willow shrub communities follow disturbances. The bottomland vegetation along the Middle Fork of the Koyukuk River increases in density stand and size of trees. White spruce and balsam poplar are the predominant trees with alder and tall willow the predominate shrubs. Since most of the timber is located in the riparian zone of the Koyukuk River there is little potential for commercial harvesting of timber occurring in the planning area.

Wildlife: Fish- Most of the planning area falls in the arctic slope region north of the Brooks Range. The planning area at Coldfoot falls in the interior Alaska region between the Brooks Range and the Alaska Range. In the arctic slope region the planning area mainly involves the Sagavanirktok River and its side channels and tributaries. The Sagavanirktok River and smaller channels are classified as anadromous fish habitat. The most common species of fish includes the Dolly Varden, broad whitefish, Arctic cisco, and arctic grayling. The main channel of the Sagavanirktok River is considered sensitive year-round because it may provide rearing and over-wintering areas for all fish species. The main river is considered critically sensitive from May through June because of Arctic grayling spawning and from August through October because of Dolly Varden migration and spawning.

A small amount of sport fishing occurs in portions of the rivers and streams, primarily for Dolly Varden and Grayling. No subsistence or commercial fishery has been identified along the Sagavanirktok River. None of the streams or rivers from PLMP 95 south in the

planning area is classified anadromous fish habitat. However, there are numerous streams that are classified as sensitive from May to October because they provide foraging habitat for a number of species.

In the interior region at Coldfoot, the Middle Fork of the Koyukuk River and several of its tributaries from PLMP 205 to 247 support stocks of Dolly Varden, chum and Chinook salmon, Arctic grayling, and other species. The Middle Fork of the Koyukuk River is considered critically sensitive rearing habitat year-round, and most of the tributaries and sloughs associated with it are considered sensitive from April through October. Slate Creek at PLMP 238 is an anadromous-fish tributary and is considered sensitive during open water periods. Marion Creek at PLMP 233 provides habitat for chum and Chinook salmon and is considered critically sensitive throughout the year. Other non-anadromous streams that support Arctic grayling and numerous minor species are classified as sensitive from April through October.

Moose-Moose are widely distributed from the Sagavanirktok River Valley near Pump Station 2 southward. They are widely distributed between PLMP 239 in the Coldfoot area south to PLMP 274. Moose winter along the Sagavanirktok River. Moose hunting is influenced by the presence of the Dalton Highway. The Dalton Highway Corridor Management Area extends about 5 miles either side of the Highway. The Management area is closed to sport hunting with rifles, but game may be taken by bow and arrow. No motorized vehicles, except aircraft, boats and licensed highway vehicles, may be used to transport game or hunters within the Dalton Highway Corridor Management Area.

Caribou- A winter concentration area includes the entire northern portion of the planning area north and south of Happy Valley. Migration areas occur in a portion of the planning area from approximately PLMP 56.5 to PLMP 100, and near Coldfoot. Even though migration occurs in the Coldfoot area, it does not occur on a regular basis.

Brown Bears- Brown Bears occur along the Dalton Highway including on the North Slope. Brown Bear abundance depends upon productivity of the environment. In areas of low production such as the North Slope, brown bear densities are low. Brown bears occur in the Coldfoot area.

Black Bear- Black Bears are infrequent in the northern third of the state. A Black Bear concentration area occurs from about PLMP 226 to PL MP 237 at Coldfoot. Black Bears are associated with the settled area of Coldfoot.

Birds and waterfowl- Many of the birds and waterfowl that occur in the planning area are migratory. Habitat occurs in locations throughout the planning area. Waterfowl habitat is more prevalent in the northern planning area.

Recreation: A variety of recreational opportunities exist along the Dalton Highway. The most common activities include sightseeing and car camping along the highway. With sightseeing an important recreational activity, the scenic views are an important resource.

Visitation to the area is mainly by privately owned vehicle and tour buses. The Bureau of Land Management compiles visitation statistics at three development nodes along the highway including at the Coldfoot Visitor Center. Public use of the highway has increased. Also, the number of user nights at the Marion Creek Campground has increased from 480 in 1994 to 826 in 2001. Although increased recreation has occurred along the highway, the Bureau of Land Management estimates that the majority of visitors never leave the highway right-of-way. Those who want access to remote recreation commonly park along the highway and than travel by foot, all-terrain vehicle or other means such as floating, Small aircraft is most often used for remote recreation access. Backpacking, hunting and fishing and other forms of recreation also occur, however, because of the remoteness of the area and the limited road access, recreational use is widely dispersed.

Heritage Resources: A number of cultural resource surveys and investigations have been conducted throughout the corridor area, mainly in association with the TAPS, and other studies to determine gas pipeline routes. Cultural resources have been identified and reported pursuant to National Historic Preservation Act and requirements of the State Historic Preservation Office. This includes cultural resources and archaeological sites. Sites have been identified in the planning area. Such resources would continue to be evaluated as part of any project review.

Population: Coldfoot during the 2000 U.S. Census had a population of 13. The population would vary somewhat seasonally. There were a total of 12 total housing units, six of which were vacant but were used seasonally. The number of employees located at Pump Station 2 is normally 2. At Pump Station 3 the number of employees present at any given time would range from 75 to 100. The Department of Transportation and Public Facilities (DOTPF) has 2-3 maintenance personnel operating from the Coldfoot site. The DOTPF Sag River Maintenance Station has 3-4 personnel at any given time.

CURRENT LAND USE, LAND MANAGEMENT AND LAND PLANNING

Local Government Planning and Zoning: The northern portion of the planning area is within the North Slope Borough and addressed in the Borough's Comprehensive Plan and Zoning ordinance. In 1972 the Borough created a Highway Development District to manage development along the Dalton Highway and in adjacent areas. In 1980 the Borough adopted the Haul Road Area Comprehensive Policy Plan, which adopted the BLM-designated Haul Road Corridor delineation as the Haul Road Corridor, ranging from 12 to 24 miles wide. The policy plan is predicated on and supports the activities of an industrial-use only road. In 1983 the Borough completed the Borough Comprehensive Plan establishing a Transportation Corridor District, which superseded the highway-related development zone. In 1995 the Borough began updating the comprehensive plan, which has identified the Haul Road Corridor as a component of the overall comprehensive plan. The most significant focus is to accommodate the changed nature of the road from a principally industrial use to one open to the general public.

Coldfoot is in the Unorganized Borough and has no local government.

Coastal Management Zone: In 1985 the Borough completed the North Slope Borough Coastal Zone Management Plan. The plan requires that development activities not substantially interfere with subsistence activities in the borough. Most development activities in the borough are related to hydrocarbon exploration, development, and transportation. The Plan reinforces the Borough Comprehensive Plan in those areas pertaining to the Dalton Highway.

The North Slope Borough coastal boundary extends inland along selected streams to include all anadromous fish spawning and over wintering habitat. The North Slope Borough believes that the boundary expansions are necessary to manage uses and activities that have or are likely to have direct and significant impacts on marine coastal waters, particularly anadromous fish and sea birds. Anadromous fish are important components of the coastal zone and are very important to the North Slope Borough residents for subsistence use.

The boundary extends inland along the Kukpuk, Chandler, Anaktuvuk, Kanayut, Nanushuk (including May and Cobblestone Creeks), Itkillik, Sagavanirktok (including Accomplishment and Section Creeks), Ridbon, Lupine, Echooka, Ivishak, Saviukviayak (including Flood Creek), Shaviovik, Kavik, Canning and Marsh Fork drainages. Along each stream, a one-mile corridor from mean high water is included within the coastal zone. Portions of Sagavanirktok and the Ridbon are in the planning area.

U.S. Bureau of Land Management Utility Corridor: Prior to transfer to the state, the lands included in this site-specific plan were Federal lands managed by the Bureau of Land Management (BLM) and were designated as a Utility Corridor. The Utility Corridor was withdrawn by Public Land Order (PLO) 5150 on December 30, 1971, to protect the route for the Trans-Alaska Pipeline. The PLO withdrew the Corridor from mineral leasing and location, settlement and state and Native selections.

A Management Framework Plan for the corridor was completed by the Bureau of Land Management in 1979, which identified program objectives that supported the primary function of the corridor as a transportation and utility corridor while providing for multiple use management. The plan included among other things the creation of development nodes at areas disturbed by pipeline and road construction where new facility development would be concentrated.

The Bureau of Land Management completed the Recreation Activity Plan for the Dalton Highway and Utility Corridor in 1982 and outlined a program specific activity plan “tiered” to the Management Framework Plan. The focus of was on recreation management.

In 1991 the Utility Corridor Resource Management Plan, a general land use plan, was written by BLM and superseded the Management Framework Plan. This plan again identified the primary corridor function as a transportation and utility corridor emphasizing a balance of resource uses. The plan also designated “development nodes” at Coldfoot and Happy Valley in addition to other locations. The plan also allowed for state selections and the subsequence transfer of corridor lands to the state including the Coldfoot node and land north of Slope Mountain. This plan resulted in the transfer of the land to the State that is included in this Site-Specific Plan. The overriding assumption throughout the design of the Utility Corridor Resource Management Plan

was the primacy of the energy transportation function of the Utility Corridor. No proposed action or set of actions were to be interpreted as restricting or limiting the construction of new energy transportation systems within the Utility Corridor.

The Utility Corridor Resource Management Plan is incorporated by reference for basic land use and resource information.

Alaska State Laws Governing Land Use in Highway. Alaska Statutes (AS) 19.40 is a state law that establishes the James Dalton Highway, provides for commercial traffic, public use of the highway, prohibits disposals of land within five miles of the highway right-of-way except as provided by under AS 19.40.200, and establishes development nodes at locations including two within the planning area: Coldfoot and Happy Valley. State land within the development nodes is not available for disposal if selected by a municipality.

Off-road vehicles are prohibited on land within five miles of the right-of-way of the highway. However, this prohibition does not apply to off-road vehicles necessary for oil and gas exploration, development, production, or transportation or to a person who holds a mining claim in the vicinity of the highway and who must use land within five miles of the right-of-way of the highway to gain access to the mining claim. State Department of Fish and Game regulations prohibit the use of motorized vehicles but make exceptions for aircraft, boats or licensed highway vehicles to transport game or sport hunters within the Dalton Highway Corridor Management Area.

All of the planning area falls within the 5 mile restricted use corridor.

Dalton Highway Master Plan: In 1995 the State of Alaska established the Dalton Highway Advisory and Planning Board to craft a master plan for the sound economic development, public safety and prudent natural resource management along the Dalton Highway. The plan was completed in 1998. The plan addresses the impacts of additional public use of the road and the best ways of managing and providing for this use. The plan identified five nodes along the highway for expanded services and included Coldfoot and Happy Valley. The plan also states that development outside the nodes will be limited to such activities as interpretive sites, road pullouts, periodic rest rooms and trash receptacles. Commercial road facilities are not allowed outside of nodes. Oil and gas development activities, transportation and incidental or minor governmental facilities are allowed outside of nodes if the needs of the activity are demonstrably better met outside the nodes.

Fire Suppression: The Bureau of Land Management- Alaska Fire Service is responsible for fire suppression in the site-specific planning area.

Access: The Dalton Highway provides the primary access to the planning areas with some locations off the highway accessible on trails by off-road vehicles, or snowmachines in winter. The Dalton Highway is a state maintained, year round, two-lane gravel highway that runs from near Livengood north to Deadhorse, terminating a few miles from the Arctic Ocean. The highway is the only overland access between the North Slope oil fields and the remainder of Alaska and North America. The highway is open year round. It was built in the mid 70s to

support oil and gas development and pipeline construction. It was originally closed to the general public, Governor Hickel opened it for use by the general public in 1994.

Access by aircraft is limited to availability of landing strips or locations of opportunity. Pump Stations 2 and 3 located in the planning area do not have permanent airfields to directly support the operation of the Trans-Alaska Pipeline. Workers are transported to the stations via the Dalton Highway from air assessable locations outside the planning area, either Deadhorse or Galbraith Lake. Routine deliveries of materials and supplies are made by truck to these pump stations. Coldfoot with its airport is assessable by air. Happy Valley has an airstrip however it is officially closed and any use is at the user's risk.

RS2477 access in the planning area includes RST 450-Hickel Highway, RST 591-Coldfoot Trail, RST 209- Bettles-Coldfoot Trail, and RST 9- Coldfoot-Chandalar Lake Trail.

Subsistence Uses: A limited amount of **s**ubsistence activity occurs in and adjacent to the northern portion of the planning area, primarily caribou and furbearer hunting. Little to no subsistence activities occur in the Coldfoot planning area, however, in the vicinity of Coldfoot some subsistence activities such as wood use, fishing, and possibly trapping occur. Even though the Dalton Highway is open year around and facilitates access to areas used by both subsistence and sport users, AS 16.05.789 prohibits hunting with firearms within five miles on either side of the highway. In the area adjacent to Coldfoot, subsistence hunting may occur by residents from Wiseman, Bettles and Anaktuvuk Pass. Subsistence related concerns include competition by non-local hunters.

Contaminated Sites: Happy Valley - diesel spill at the former Trans-Alaska Pipeline construction camp in the early 1970's. Potential change in land ownership in 1996 required site assessment. Additional assessment and remediation is required.

Pump Station 3- additional work may be required.

Unauthorized Use: No known unauthorized uses in planning area.

PROPOSED LAND USE PLAN

Existing and Proposed Future Use:
The vast majority of land in and adjacent to the planning area is undeveloped and remote. The primary existing uses within the plan include the Dalton Highway used for commercial, industrial and public access, and portions of the Trans-Alaska Pipeline and attendant facilities including pump stations, river training structures, communications sites, and a fuel gas line. Other structures include airstrips, access roads, material sources, disposal sites and other specific use sites. Also the Trans-Alaska Gas Pipeline conditional right-of-way and Northwest Alaskan Gas Pipeline right-of-way are located in portions of the planning area (see description of pipelines in Oil and Gas section, page 6).

Recreation and tourist activities occur in the planning area because of access provided by the Dalton Highway and most uses are limited to the Dalton Highway. Tour buses

operate on the road during the short summer season. Although most recreation activities are permissible on state lands, restrictions exist along the Dalton Highway for use of off-road vehicles and hunting with firearms within 5 miles of the highway right-of-way is prohibited.

State law (AS 19.40.200) restricts the disposal of state land and materials within 5 miles of the Dalton Highway and limits development to specific nodes. Development nodes are recognized at Coldfoot and Happy Valley.

The proposed land use plan recognizes the existing land uses and development based primarily on the planning efforts that have already identified the area as a corridor and established locations as nodes for development and expanded services, and made recommendations for increased public use of the highway. The proposed land uses will not cause additional restriction to existing subsistence uses. There are potential limitations to resource and subsistence users as future development occurs within the corridor and along the Dalton Highway. However, specific impacts will be addressed based on project-specific review and analysis, and consistent with applicable federal, state and local government requirements.

Coldfoot Node- This site was originally developed as a pipeline construction camp and airstrip. The Bureau of Land Management, when this land was under its management, identified Coldfoot and Happy Valley as development nodes in the utility corridor. The state as the current landowner has recognized under AS 19.40 and the Dalton Highway Master Plan the need for and continued use of this area as a development node. A development node as defined in the Dalton Highway Master Plan is a distinct and compact cluster of development in the Dalton Highway Corridor. The node is an area with a minimum footprint on the land where public as well as private commercial facilities and development related to road traffic are allowed to locate. Public facilities and roadside development including campgrounds, outhouses and interpretive sites should be clustered at nodes to the maximum extent possible.

The Coldfoot service area presently has a DOT/PF airport, a DOT/PF maintenance camp, a Bureau of Land Management Field Office, dump station, food, gas station, first aid, lodging, a post office, visitor center, potable water, restrooms, RV camping, showers, and telephone. A tow truck is available and minor repairs can be made.

This site-specific plan recognizes the importance of this node to the Dalton Highway and the continued need for utilization of existing facilities and services, and future development of appropriate additional facilities and services. The recommendations contained in the Dalton Highway Master Plan dated March 1998 are used to guide future development at the Coldfoot Development Node and the Dalton Highway. Based on the suitability, existing and anticipated land uses, and the Dalton Highway Master Plan the Coldfoot area should be designated and classified for development purposes while continuing to recognize the importance of the corridor for transportation and utility purposes.

Happy Valley- The Bureau of Land Management's 1991 Resource Management Plan and the state's amendments to AS 19.40 designated a development node in the Happy Valley area. The pad located at Happy Valley originally was constructed as a pipeline construction campsite and

airstrip. The North Slope Borough selected this area as part of its municipal entitlement. The State Department of Transportation and Public Facilities applied for an Interagency Land Management Assignment for a portion of the area including the airstrip, material sites and area for future expansion. Until the North Slope Borough and the Department of Transportation and Public Facilities interests are adjudicated, the Division of Mining, Land and Water authorizes activities under short-term permits. This plan recognizes: the existing pipeline uses; the area is identified as a node for expanded services; the issue of site contamination cleanup is not resolved; and decisions have not been made on the North Slope Borough selection or on the Department of Transportation and Public Facilities pending application.

Adjacent Land and Uses: The most significant adjacent land use is wilderness and wildlife habitat, with primarily recreation activities, subsistence and some mining use taking place. Land adjacent to the northern portion of the planning area is state land. The Gates of the Arctic National Park and Preserve and the Arctic National Wildlife Refuge area adjoin the southern portion of the panning area. The Utility Corridor to the south of the planning area and both north and south of the Coldfoot node is owned by the federal government and managed by the Bureau of Land Management.

Oil production on the North Slope is expected to continue in future years. Eventually the very large natural gas reserves will be developed. Industry has demonstrated interest in exploring for natural gas on state land in and adjacent to the northern part of the planning area.

ISSUES/ALTERNATIVES/IMPACTS

The Dalton Highway Master Plan raised corridor-wide development issues directly related to the increased public use of the Dalton Highway. These issues included:

- There is a lack of adequate public medical services and no safety response program on the Dalton Highway.
- Increased usage will bring demand for additional public safety services.
- Opening the Dalton Highway threatens fish and wildlife through increased access. Adequate fish and wildlife protection must be maintained or improved through ongoing programs.
- As traffic increases, the need for more management of foot traffic will be necessary as well as enforcement of off road vehicle rules.
- With public opening of the Dalton Highway and scheduled improvements, there will be increased demand on resources.
- There is a lack of sanitation facilities and public services along the Dalton Highway to protect the environment and public health.
- There is a lack of interpretive sites and information signs along the highway.

These are issues that affect the planning area and must be taken into consideration in managing the land use and resources within this site-specific plan. This plan incorporates by reference the Dalton Highway Master Plan in considering the appropriate designated land use and classifications in the planning area.

Due to continued oil development and future natural gas development, the corridor and planning area will continue to be used for oil and gas transportation and related uses. The North Slope Borough Comprehensive Plan provides that unless no feasible and prudent alternative is available transportation facilities for resource development and extraction are to be consolidated to the maximum extent possible. The plan also states that it is the policy of the North Slope Borough to minimize the number of transportation corridors through cooperative long-term planning efforts with private industry and other governmental entities. Use of the existing corridor is recognized by the North Slope Borough in its Comprehensive Plan.

Increased recreational use of the Dalton Highway is expected to have an impact on adjacent lands and resources, especially on lands immediately adjacent to the Highway that are more easily accessed. Management of recreation use and off-road access to enhance experiences and to protect adjacent lands and resources will be required. Off road access points should be limited.

Increases in road traffic increase fugitive dust, however, the Dalton Highway is undergoing a major improvement program that includes resurfacing with high-float emulsion. This will reduce vehicle fugitive dust and improve road quality. It is anticipated under the current plan that 90 to 95% of the Dalton Highway will be resurfaced by the end of 2006.

Alternative land uses in the planning area are very limited by statutory restrictions within 5 miles of the Dalton Highway, and the existing authorized uses and development. Emphasis should be placed on minimizing the effects from existing uses and potential development as it occurs. To establish another corridor in a different location would result in additional impacts to resources, subsistence activities and the environment as well as raising issues and possible conflicts.

PROPOSED LAND USE PLAN AND CLASSIFICATIONS

Several factors must be weighed in assigning appropriate classifications to these lands. Among these are: the state law that directs use of the Dalton Highway and adjacent lands and places prohibitions and restrictions on disposal of land or material and the use of off-road vehicles within five miles of the highway; the purposes for which the land was selected by the state; the existing and future use of the corridor for transportation and utility purposes; the increased public access and use of the highway; the Dalton Highway Master Plan; and the North Slope Borough planning documents, and the existing North Slope Borough selection of some of the land.

The planning area is divided into 4 planning sub-units: Pump Station 2, Happy Valley, Coldfoot, and Remainder of Corridor.

Management Intent Applicable To All Management Units:

The entire planning area will be managed as a corridor for oil and gas transportation and related uses. Location and use of material resources, and the location, construction and maintenance of pipelines and attendant facilities should be carefully managed to minimize impacts on the use of the corridor for pipelines, and should also minimize impacts on the fish and wildlife resources.

Development outside the Coldfoot and Happy Valley nodes will be limited to such activities as road pullouts, periodic rest rooms and trash receptacles. Commercial road service facilities are not allowed outside of nodes. Oil and gas development activities, transportation and incidental or minor governmental facilities are allowed outside of nodes if the needs of the activity are demonstrably better met outside the nodes.

The plan identifies two development nodes. A Development Nodes is defined in this SSP the same is in the Dalton Highway Master Plan, that is a distinct and compact cluster of development. The node is an area with a minimum footprint on the land where public as well as private commercial facilities and development related to road traffic are allowed to locate. Public facilities and roadside development including campgrounds, outhouses and interpretive sites should be clustered at nodes to the maximum extent possible.

AS 19.40's explicit prohibition on disposal of state land within 5 miles of the Highway does not apply to a disposal to a licensed public utility or licensed common carrier under AS 38.05.810(e), or for a state lease or material sale for exploration, development, production, or transportation of oil and gas; reconstruction or maintenance of state highways; or construction or maintenance of airports.

Mining is an incompatible use on all state land within or immediately adjacent to the Trans-Alaska Pipeline right-of-way. The state is committed to take all reasonable actions necessary to preclude the creation of any new mining claims or leasehold locations in these lands. The best interests of the state would be served by closure in accordance with AS 38.05.185 of the lands within a mile wide corridor, one-half mile either side of the alignment of the Trans-Alaska Pipeline. Much of this area is already closed to mineral entry as it overlaps existing Mineral Closing Order (MCO) 67 which closes a mile wide corridor, one-half mile either side of the alignment of the Northwest Alaskan Gas Pipeline, and MCO 529 which closes a corridor one mile wide, one-half mile either side of the alignment of the Trans-Alaska Gas Pipeline. The estimated additional mineral closing for the TAPS corridor is 17,460 acres.

Management Intent and Classification by Planning Sub-Unit:

Pump Station 2: T1N, R15E, UM Section 6, 7, 18, 19 and T1N, R14E, UM Section 1, 5, 8, 11-15, 17-36. This area will be managed to provide facilities that support transportation and utility uses. The state will retain in state ownership land underlying existing oil and gas transportation facilities such as the pipeline and pump stations, plus any areas identified for expansion of such facilities. The North Slope Borough's pending municipal entitlement selection, ADL 414836, is in this planning area. Land not needed for existing and future facilities may be conveyed to the North Slope Borough under AS 29.65. The determination of exactly what lands will be conveyed to the Borough will be made through the AS 29.65 decision and Best Interest Finding (AS 38.05.035(e)) for the Borough's selection.

Although this area will be managed to provide facilities that support transportation and utility uses, more detailed analysis is needed to determine what, if any, land may be suitable for transfer

to the North Slope Borough, therefore, these lands are designated and classified as **"Resource Management Land"**.

In determining the overall best interests of the state, consideration must also be given to the state's obligation to fulfill the Borough's entitlement under AS 29.65. Although this plan recognizes that the borough has selections filed on some lands, the plan does not constitute a decision under AS 29.65 to convey the lands to the borough. The plan considers the selections in determining the appropriate classification that would allow continued state management or conveyance to the borough should the decision be made by the state to convey the land. The classification Resource Management recognizes that the land is presently remote and for which a specific resource allocation decision is not possible because of a lack of adequate resource, economic, or other relevant information. This classification meets the criteria of "vacant, unappropriated, unreserved land" under AS 29.65 and would allow a conveyance should such a decision be made, or continued management by the state.

Happy Valley: T3S, R14E, UM Section 4, 5, 7-9, 16-20, 29-32. A portion of this area will be managed as a development node (Sections 19, 20, 29, 30) to provide facilities that support transportation and utility uses, including public services, tourist and traveler facilities, recreation and other related facilities. The state will retain in state ownership land underlying existing oil and gas transportation facilities such as the pipeline, and land needed for state managed public facilities. Land not needed for existing and future facilities may be conveyed to the North Slope Borough under AS 29.65. The determination of exactly what lands will be conveyed to the Borough will be made through the AS 29.65 and Best Interest Finding (AS 38.05.035(e)) for the Borough's selection.

This plan recognizes: the possible use of the land at Happy Valley as a development node; the pending selection, ADL 414838, of land by the North Slope Borough; the Department of Transportation and Public Facilities pending application ADL 415414, which overlaps a portion of Borough selection ADL 414838; and, the need to resolve any remaining issues concerning the Happy Valley contaminated site and the resource values associated with the area.

The management intent for these lands is to recognize the existing uses while allowing only short term new activities until the adjudication of the pending applications from the North Slope Borough and the Department of Transportation and Public Facilities, yet maintaining the state's ability to use the land for transportation, pipeline and utility corridor purposes. These land are designated and classified as **"Resource Management Land"**.

In determining the overall best interests of the state, consideration must also be given to the state's obligation to fulfill the Borough's entitlement under AS 29.65. Although this plan recognizes that the borough has selections filed on some lands, the plan does not constitute a decision under AS 29.65 to convey the lands to the borough. The plan considers the selections in determining the appropriate classification that would allow continued state management or conveyance to the borough should the decision be made by the state to convey the land. The classification resource management is retained for land that is presently remote and for which a specific resource allocation decision is not possible because of a lack of adequate resource, economic, or other relevant information. This classification meets the criteria of "vacant,

unappropriated, unreserved land" under AS 29.65 and would allow a conveyance should such a decision be made, or continued management by the state.

Coldfoot: T28N, R12W UM Section 3, 4, 9, 10,15, 16, 20, 21, 22 and T29N, R12E UM Section 23, 24, 25, 26, 27, 34, 35. The management intend for land within the Coldfoot development node is to provide for continued operation of existing services and additional or expanded services in support of the use of the Dalton Highway by industrial and commercial traffic as well as use by the public. This site-specific plan also recognizes the past, present, and future importance of this land as a transportation and utility corridor for authorized pipeline purposes and for future use because of its location and accessibility. The land at Coldfoot, because of its existing use, physical qualities and suitability for year around commercial development is designated and classified as **"Settlement Land"**.

Remainder of Corridor: The remaining corridor land will be managed for transportation and utility uses and will be retained in state ownership. This site-specific plan recognizes the past, present, and future importance of this land as a transportation and utility corridor for authorized pipeline purposes and for future use because of its location and accessibility. At the same time it is important that other resource values are recognized in the use and development of this land. This is particularly important with the increasing use of the area by the public. The management intent for the land adjacent to the Dalton Highway right-of-way, with the exceptions of the lands at Pump Station 2, Coldfoot and Happy Valley, and the land selected by the Borough, is to provide for existing transportation of oil and gas and to recognize the potential for location and construction of future access, pipelines or utilities while minimizing adverse effects to the environmental and access for other resource use.

Support services that can be located at nodes will not be allowed in this unit. This land is designated and classified as **"Transportation Corridor Land".**

PROPOSED CLASSIFICATIONS – HAUL ROAD SITE SPECIFIC PLAN

Map #	Legal Description	Proposed Classification
Map 1	T1N, R15E, UM Section 6, 7,18, 19 Containing 2519 acres, more or less	Resource Management
Map 2	T1N, R14E, UM Section 1, 5, 8, 11-15, 17-36 Containing 17,900 acres, more or less	Resource Management
Map 3	T1S, R14E, UM Section 1-4, 9-11, 14-16, 21-23, 27, 33, 34 Containing 10,240 acres, more or less	Transportation Corridor
Map 4	T2S, R14E, UM Section 3, 4, 9, 10, 15-17, 20-22, 28,29, 32, 33 Containing 8,960 acres, more or less	Transportation Corridor
Map 5	T3S, R14E, UM Section 4, 5, 7-9, 16-20, 29-32 Containing 8,853 acres, more or less	Resource Management
Map 6	T4S, R14E, UM Section 5-8, 17-20, 29-32 Containing 7653 acres, more or less	Transportation Corridor
Map 7	T5S, R14E, UM Section 4, 5, 8, 9, 16, 17, 19-21, 26-32 Containing 8,815 acres, more or less	Transportation Corridor
Map 8	T6S, R14E, UM Section 5-8, 17-20, 29-32 Containing 7,457 acres, more or less	Transportation Corridor
Map 9	T7S, R14E, UM Section 4-9, 16, 17, 20, 21, 28, 29, 32 Containing 8,265 acres, more or less	Transportation Corridor
Map 10	T7S, R13E, UM Section 12, 13, 24, 25, 36 Containing 3200 acres, more or less	Transportation Corridor
Map 11	T8S, R13E, UM Section 1, 11-17, 20-24, 26-28, 32-34 Containing 12,160 acres, more or less	Transportation Corridor
Map 12	T8S, R14E, UM Section 5, 6, 7, 8, 18 Containing 3166 acres, more or less	Transportation Corridor
Map 13	T29N, R12W, FM Section 23-27, 34, 35 Containing 2,560 acres, more or less	Settlement
Map 14	T28N, R12W, FM Section 3, 4, 9, 10, 15, 16, 20, 21, 22 Containing 4,020 acres, more or less	Settlement

LAND TO BE CLOSED TO NEW MINERAL ENTRY

DNR proposes to close the following lands to new mineral entry in accordance with AS 38.05.185. DNR will close all state owned lands within a mile wide corridor, one-half mile either side of the alignment of the Trans-Alaska Pipeline. Much of this area is already closed to mineral entry as it overlaps existing Mineral Closing Order (MCO) 67 (MCO for the Northwest Alaskan Gas Pipeline), and MCO 529 for the Trans-Alaska Gas Pipeline. The estimated additional mineral closing for the TAPS corridor is 17,460 acres.

The following are the townships and sections where land will be closed and an acreage of the proposed closing. More precise acreage will be determined when the MCO is depicted on the status plats:

Township, Range, Meridian	Estimated acres closed
T 1 N, R 15 E, UM - Pump Station 2	500
T 1 N, R 14 E, UM	2,240
T 1 S, R 14 E, UM	2,240
T 2 S, R 14 E, UM	0
T 3 S, R 14 E, UM - Happy Valley	3,840
T 4 S, R 14 E, UM	1,500
T 5 S, R 14 E, UM	2,560
T 6 S, R 14 E, UM	1,920
T 7 S, R 14 E, UM	1,920
T 8 S, R 13 E, UM	640
T 8 S, R 14 E, UM	100
ESTIMATED TOTAL acreage	17,460 acres

SUMMARY OF AND RESPONSE TO PUBLIC COMMENTS
(To be added after public review)

Signed:

_____ Date _____

Bob Loeffler, Director
Division of Mining, Land and Water

Sources

Alaska Department of Natural Resources, Division of Oil and Gas. Oil and Gas Lease Sale – North Slope Foothills Areawide, Final Finding of the Director, February 7, 2001.

Dalton Highway Advisory and Planning Board, State of Alaska. Dalton Highway Master Plan, March 1988.

North Slope Borough. Coastal Management Plan.

U.S. Department of Interior, Bureau of Land Management. Utility Corridor, Proposed resource Management Plan and Final Environmental Impact Statement, September 27, 1989.

APPENDIX I

TITLE/LAND STATUS